

Agenda Item: Item 3
Meeting Date: February 22, 2007

Delta Regional Ecosystem Restoration Implementation Plan (DRERIP)

Summary: The CALFED Bay-Delta Program Ecosystem Restoration Program (ERP) is leading the development the Delta Regional Ecosystem Restoration Implementation Plan (DRERIP). The Plan seeks to fulfill the original vision of the ERP Strategic Plan by identifying actions that can achieve restoration goals in an adaptive management context. The current focus of the DRERIP team is the development and application of science-based tools to evaluate and prioritize restoration actions for the Delta.

Action: Provide comments on the draft Conceptual Model Peer Review Process prior to its implementation in spring 2007.

Background: The purpose of DRERIP is to plan for ecosystem restoration in the Delta based on the current state of scientific knowledge and provide tools to guide the long-term restoration of the Delta ecosystem. The current focus of DRERIP is the development and application of conceptual models and a process for scientifically evaluating actions to aid planning for Delta restoration. The approach is well supported by the ERP agencies and is being recommended as a strategic approach to be used in all future conservation planning and restoration activities in the ERP focus area. For example, the tools and approach could be used to support planning and assessment for the Bay Delta Conservation Plan (BDCP) and Delta Vision.

Accomplishments: ERP staff and other experts involved in DRERIP have been working since 2002 to develop the tools needed to implement an adaptive management approach to restoring Delta ecosystems. In accordance with the ERP Strategic Plan, conceptual models that reflect the current understanding of the system, are to be used to identify whether proposed actions are worthy of support, and whether the appropriate action should be targeted research, pilot-scale or full-scale implementation. The DRERIP Adaptive Management Planning Team (AMPT) has prepared the following documents:

- Framework for the Development of DRERIP Ecosystem Conceptual Models
- Species Life History Conceptual Model Guidelines
- Guidelines for the Scientific Evaluation of Actions (also known as Vetting)

- Peer Review Strategy

These documents are available from:

http://www.delta.dfg.ca.gov/erpdeltaplan/science_process.asp

The former ERP Science Board, in whole or in part, was engaged in the development and review of these documents, including testing of the Guidelines for Scientific Evaluation in May 2005.

In addition, ERP staff has created an 'Actions Database' that includes details of all proposed actions included in existing ERP documents. The Department of Fish and Game staff have also developed species life cycle models for all 'R' species (recovery), 'r' species (contribute to recovery), 'm' species (maintain), and 'h' species (harvestable) to provide a basis for the development of individual life history models.

Recent Developments: In summer 2006, after a hiatus of approximately 1 year, the DRERIP team embarked on a focused effort to develop the conceptual models and processes necessary to evaluate actions proposed to address the Pelagic Organism Decline. The goal is to have a set of prioritized, feasible, scientifically evaluated actions by December 2007. The AMPT identified priority species for life history model development and the ecosystem models (habitats, processes and stressors) necessary to evaluate actions proposed for these species. The conceptual models constitute the information base for determining if proposed actions or targets will have their intended effect, what the potential unintended effects may be, and what level of certainty exists around those findings.

Life history models are being developed by individual experts. Three ecosystem conceptual model development workshops have been held since August 2006, and 14 models are currently in development with additional ecosystem models to be initiated in the near future. A list of the species and ecosystem models being developed is found in Attachment 1.

Peer Review: Acknowledged experts will be engaged to review the species life history conceptual models. ERP implementing agency staff will identify individual peer reviewers in consultation with the AMPT, CALFED Science Program staff, UC Davis, and other Bay-Delta Program staff as appropriate. The review questions for the species models are listed in Attachment 2.

A technical peer review panel has been established to review the ecosystem conceptual models (see Attachment 3 for a description of the ecosystem model peer review process). The first peer review panel meeting is scheduled for March 22nd and 23rd, 2007.

It is anticipated that the CALFED Independent Science Board (ISB) will evaluate and comment on the DRERIP model reviews and the responses to the reviews. At this stage, the AMPT requests comments on the proposed conceptual model peer-review

process prior to its initiation, and welcomes input from ISB members on the approach currently envisioned.

Questions to ISB:

- Does the proposed DRERIP peer review process appear to be sound?
- Are there recommended changes to the DRERIP peer review process?

Attachments:

Attachment 1 – List of DRERIP Species and Ecosystem Conceptual Models and their Developers

Attachment 2 – DRERIP Species Model Review Form

Attachment 3 - Draft Peer Review Process for DRERIP Ecosystem Conceptual Models

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